Appendix 7
CARES Comments on Waste Management Plan/Attachment B of Tentative G.O. WDRs

Page 1, paragraph 1

- CARES recommends that the Regional Board clarify the meaning of a Waste Management Plan (WMP) that has been "certified" by an engineer. Certification should not imply that the engineer is certifying that the facility will prevent adverse impacts to groundwater or surface water quality, as those factors are driven by factors, including day-to-day management, that are outside the control of the engineer. The meaning here should be limited to the engineer certifying that measurable performance standards are met.
- Suggest revising "… certified by a civil engineer who is registered …" to "certified by a civil engineer or agricultural engineer who is registered …"

Section I (Facility Description)

- Some elements of the facility description are complex, such as providing detailed maps. Due to limited professional resources, CARES is concerned that dairy producers who need professional assistance in meeting these requirements may run into trouble meeting the applicable deadlines.
- Suggest a revised table in I.D as follows:
    - Create three categories of heifers, 15-24 months, 7 to 14 months, and 4 to six months while defining calves as 3 months or younger.
    - Delete the column that talks about "maximum number of animals in past 12 months" and replace with "design build-out number of animals (maximum permitted number)"
- Suggest adding the word "Estimate" at the beginning of I.E., e.g. "*Estimate* total volume (gallons) …" Most dairy producers do not have equipment or expertise to carry out exact measurements.
- I.F.1: CARES suggests it be stated that a map based on an aerial photo is sufficient and that a field survey is not necessary.
- I.F.2: Liquid and solid wastes on owned, leased or agreement lands necessary to accomplish proper nutrient balance should be shown. The dairy operator should not be required to identify liquid or solid manure application areas under the control of third parties. Amounts of nutrients exported to other parties can be maintained in a separate record if needed to demonstrate nutrient balance.
- I.F.3: This paragraph should state that dairy croplands not using manure are covered under either the irrigated lands waiver or the general WDR but not both.

Section II (Containment Capacity Engineering Report)

- CARES suggests the first sentence be reworded as "A report, prepared by a trained professional, which demonstrates the existing facility has adequate containment capacity." CARES recognizes that non-engineering professionals including trained producer association field staff and other experts are able to provide the services described in this section.

- CARES suggests deletion of paragraph II.A.1 as it unnecessarily complicates storage planning; additional requirements in Section II meet the same needs.
- II.A.7: Suggest this be revised to state: "Storage calculations shall account for estimated sludge accumulation on the pond bottom."
- II.B: Suggest this section also allow use of a registered Agricultural Engineer in addition to a civil engineer.

Section III (Flood Protection Engineering Report)

- III.D should be the first paragraph as the others are unnecessary if this requirement is met.

Section IV (Production Area Design and Construction Report)

- IV.A.2 – This requirement may be interpreted to require a costly topographic survey and hydrologic and hydraulic calculations. CARES recommends that a uniform questionnaire be developed for dairy producers themselves, which can be provided by the Regional Board and also may be a teaching tool for the California Dairy Quality Assurance Program. This would allow dairy producers to assess their own facilities and to better understand exactly what modifications, if any, would be needed.

Section V (Operation and Maintenance Plan)

- V.C – Suggest striking the word "maximum" and replacing with "adequate." Providing maximum capacity prior to October first will increase storage capacity needs for ponds to six months, imposing an impractical burden and essentially oversizing storage needs. Because different areas of the Central Valley have different rainfall patterns, a specific cutoff date should be removed.
- V.J. – This section should be clarified to avoid potential misinterpretation. This could be interpreted that residual chemicals such as footbath washout or milk barn antiseptics need to be handled separately from rinse water for disposal; this would pose a significant burden with no corresponding environmental benefit. CARES recommends a wording change and we are prepared to work with Regional Board staff to identify the significance of the issue. The wording should clearly acknowledge that the retention pond is <u>not</u> a disposal system for pesticides, unneeded chemicals, etc.

Section VI (Backflow/cross-connection Prevention)

- Suggest replacing "consultant" with "other person"

Appendix 8
CARES Comments on Nutrient Management Plan/Attachment C of Tentative G.O. WDRs

General Comments

CARES is currently working with a team of expert consultants, including Provost & Pritchard Engineering Group, Inc., and Dellavalle Laboratory, Inc., to conduct a "test drive" of the Tentative General Order WDRs on real commercial dairies. The goal is gather real-world data on costs and logistical issues to support comprehensive recommendations going forward. This combined with the experience of our technical team should provide workable suggestions moving forward toward the eventual adoption of the General Order.

When complete (we currently anticipate a time frame of about four more weeks), CARES will provide a detailed technical briefing to the Regional Board and staff encompassing a monitoring and reporting program, nutrient management planning and a detailed cost assessment of both the currently proposed tentative order and technically sound alternatives.

Comments herein are intended to represent a step toward our final recommendations by both identifying and describing the issues raised in the tentative order while beginning to make specific suggestions as to how these may be addressed.

Specific comments

- As detailed in other parts of our comments, requiring the dairy operator to demonstrate that manure delivered to a third party is applied agronomically is both unworkable and inappropriate. "Written agreements" as described in the tentative order will discourage both the dairy operator and potential users of the manure and will thus hamper effective nutrient management by one option for nutrient use off the dairy.
- Attempts to limit water applications as described in the order are generally incompatible with commercial farming practices in California, including farmland not associated with dairies.

Land application area information

- The Regional Board should give additional guidance with regard to appropriate scale of map. Varying scales may be useful for preparing site details. CARES is preparing additional recommendations for anticipated upcoming workshops with Regional Board staff.
- Data requirements and record keeping in I.A and I.B are excessive and should be reduced to only essential information needed for nutrient management. CARES is preparing specific recommendations.
- It is inappropriate (I.C) to require a dairy operator to account for manure use after manure is delivered to third-party control. The dairy owner should use a manifest to track the transaction if it is required to demonstrate nutrient balance and maintain a record of the manifest. Additional record-keeping and maps is

burdensome without any corresponding environmental benefit. All of I.C requirements should be deleted.
- Delete Item I.D as it is redundant with I.A

Nutrient budget
- Nutrient Budget should be changed to "nutrient guidelines" as these are subject to change and should be adjusted as information becomes available. Nutrient loading rates should be based on conditions at the time of application. The "budget" needs to be flexible to allow for real-time, real-word conditions. A pro forma budget can rely on book values while actual applications are best adjusted to site-specific data.

Field risk assessment
- The requirements in Section V are unclear at best and overly subject to interpretation by enforcement staff and dairy operators. Additional specific guidance is needed, such as a risk assessment chart or other such tool. CARES coalition members are willing to assist the Regional Board in assessing the need and developing field risk assessment tools as needed.

Technical standards for nutrient management
- Delete "legume" from last sentence of III.A
- Delete "certified" in III.B
- Delete "legume" in III.C
- Delete "legume" from IV.
- "Nutrient requirements" in IV can be anywhere from 1.65 to 3.0 of the crop uptake, as detailed elsewhere in the tentative order and in CARES previous comments.
- Delete "at time of application" from first paragraph of V. Nutrient application prior to crops needs may be necessary to allow mineralization of organic N and movement into the root zone/
- V.A.1 should be revised both here and in the General Order to clarify that only application by the Discharger to third-party lands is prohibited without a written agreement. Once manure nutrients are transferred to third-party control, they are not the responsibility of the dairy operator except as needed to maintain manifests to document the transfer of nutrients offsite. This section should not be construed to prevent application by a third-party without a written agreement.
- The reference in V.A.3 appears to be incorrect.
- V.A.4 and 5. As stated in earlier comments, CARES believes it is inappropriate to use the general order to regulate application of manure or manure nutrients by third parties or to attempt to regulate the dairy operator for activities beyond his or her control. CARES has offered as part of these comments specific suggestions for appropriately designing manure manifests.
- V.A.7 appears to incorrectly quote the General Order.
- V.A.11 is redundant with V.A.1; CARES comments on V.A.1 apply.

- V.A.16 should be deleted entirely. The critical issue is that all applications be made consistent to a nutrient management plan; there may be instances where such an application is in fact appropriate based on an NMP.
- In V.A.17, "crop water use requirements" should be changed to "water required for efficient crop production."
- V.B.1.a – In cropping operations, applications should be based on the rates necessary to maximize crops yields, not on maximum levels to "contain" nutrients. The University of California Committee of Experts report cited on page five of the Information Sheet of the Tentative Order indicates this, when the authors state: "In considering land application of organic manure, it is meant to stand in contrast to a land application rate." (2005, Sec. 5.7.1 on page 45).
- V.B.1.b – Strike "to a good steward of the manure" as dairy operators have no way of determining or controlling third-party actions and it is inappropriate to require them to do so.
- V.B.2.a .i – Pre-side dress profile nitrate tests can also be used to predict the need for additional nitrogen. The University of California has calibrated pre-side dress profile N tests for sugar beets and cotton. Private consultants have adapted these to other crops. CARES recommends adding the pre-side dress profile nitrate test option here.
- V.B.2.a.III – This is overly restrictive and will result in a prohibition of use of manure. Rather, we suggest changing the language to read: "The form, timing and method of application to facilitate timely nitrogen availability to the crop; …"
- V.B.2.b – In cases where newly cropped land has not received organic soil amendments, higher application rates may be needed to sustain economic growth until sufficient organic matter accumulates in the soil. In cases where corn follows winter grain, deficiencies could result. Proper nutrient management accounts for removal of the previous crop, therefore this section is not needed and should be deleted.
- V.C.2 – Historical records are averages only. Basing applications of process wastewater on historical rains rather than current weather data is not appropriate. This paragraph should be deleted.
- V.C.5 – Amend this to say "Except for orchards and vineyards, …"
- VI.E – It is inappropriate to require that manure be incorporated (this is not possible, for example, in pastures). What is required is either that manure be applied concurrent with a nutrient management plan, or that any stormwater runoff be free of manure constituents.
- VII.D – The critical issue is protecting the wellhead from standing water; so long as this is done the threat is minimal. Elevated wellheads or berms are sufficiently protective. The "doubling" requirement should be removed.
- VIII – See previous comments on Field Risk Assessment. Additional guidance is needed or there will be too many individual value judgments involved.

Appendix 9a

CARES Comments on:

- Manure Manifest (Attachment D of Tentative G.O. WDRs)
- Definitions (Attachment E)

Attachment D

CARES suggests adoption of an improved manifest; a suggested version of this manifest is included with these comments as Appendix 9b.

Definitions (Attachment E)

- Change "10 percent" to "15 percent" in #14 and #15
- Change "irrigation return flow" to "irrigation tailwater" in #20
- Change #52 to read: "Wet season" is defined as the period of time generally occurring between 1 October and 31 May of each year, and may vary substantially from year to year."

ATTACHMENT D

Manure/Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

Instructions:

1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2) If there are multiple destinations, **complete a separate form for each destination**.
3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

Operator Information:

Name of Operator: _____

Name of Dairy Facility: _____

Facility Address: _____
Number and Street City Zip Code

Contact Person Name and Phone Number: _____
Name Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company and Contact Person: _____
Hauling Company

_____
Number and Street City Zip Code

_____
Contact Person Phone Number

Destination Information:

Hauled to (please check one):

☐ Composting Facility Name_____
Address_____

☐ Broker Name_____
Address_____

☐ Farmer Name_____
Address_____

☐ Other Name_____
Address_____

Dates Hauled: _____ _____

TENTATIVE

TENTATIVE

Amount Hauled:
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: _____Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure:
_____

Nitrogen content _____% _____lbs/ton _____lbs/yard

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

Process Wastewater: _____ Gallons
Method used to determine volume of process wastewater
_____

Nitrogen content _____mg/L _____ lbs/1000gal

Certification:
I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Operator's Signature: _____ Date: _____

Hauler's Signature: _____ Date: _____